Appendix A.1

Foster Wheeler Field Investigation Data Compendium

ARCS I PROGRAM

Remedial Planning Activities at Selected Uncontrolled Hazardous Substance Disposal Sites Within EPA Region I (ME, VT, NH, MA, CT, RI)

PRELIMINARY DATA COMPENDIUM
WELLS G & H RI/FS
OPERABLE UNIT III
ABERJONA RIVER STUDY
SAMPLING PERIOD JULY 31, 1995
TO SEPTEMBER 12, 1995

EPA Contract 68-W9-0034

FOSTER WHEELER
FOSTER WHEELER ENVIRONMENTAL CORPORATION

WELLS G & H ABERJONA RIVER

DATA COMPENDIUM

SAMPLING PERIOD: JULY 31, 1995 TO SEPTEMBER 12, 1995

1. INTRODUCTION

2. FIELD SAMPLING

   2.1 Site Locations (map showing all station locations)
   2.2 Station Descriptions (include field drawings)
   2.3 Sample Reference Tables
   2.4 Field Chemistries

3. SURFACE WATER ANALYSES

   3.1 General Water Quality (alkalinity, chloride, nitrate/nitrite, sulfate, TDS, TSS)
   3.2 VOCs (524.2) *
   3.3 SVOCs *
   3.4 PCBs/Pesticides *
   3.5 Inorganics (metals, CN) *
   3.6 Total Dissolved Carbon (dissolved organic carbon)

4. SEDIMENT ANALYSES

   4.1 VOCs *
   4.2 SVOCs *
   4.3 PCBs/Pesticides *
   4.4 Inorganics (metals, CN) *
   4.5 AVS/SEM
   4.6 Organic Carbon (total organic carbon or total combustible organics) and percent moisture
   4.7 Grain Size Distribution

5. FISH TISSUE ANALYSES

- 5.1 Fish Statistics (length, weight, condition)
- 5.2 SVOCs *
- 5.3 PCBs/Pesticides *
- 5.4 Inorganics (metals, CN) *
- 5.5 Percent Moisture and Lipids

6. CRAYFISH ANALYSES

- 6.1 Crayfish Statistics (average length and weight of composites)
- 6.2 SVOCs *
- 6.3 PCBs/Pesticides *
- 6.4 Inorganics (metals, CN) *
- 6.5 Percent Moisture and Lipids

7. PLANT TISSUE ANALYSES

- 7.1 Description of Composite Samples
- 7.2 SVOCs *
- 7.3 PCBs/Pesticides *
- 7.4 Inorganics (metals, CN) *
- 7.5 Percent Moisture

8. SEDIMENT BIOASSAY REPORT

* summary statistics and backup tables

1. INTRODUCTION

1. INTRODUCTION

The field investigations supporting the Wells G & H Aberjona River Risk Assessment were executed over the period July 31 to September 12, 1995. All fish and crayfish sampling, with the exception of two background locations, was performed July 31 to August 4, 1995 under the direction of the Fish and Wildlife Service. The F&W team, led by Kenneth Munney, was supported by two Foster Wheeler personnel who were responsible for packaging, labeling and initiating chain of custody procedures. The fish and crayfish samples were maintained in a freezer until the sampling was completed, at which time, a selection of samples to be submitted for laboratory analysis, was made.

The Field Operations Plan, (July 1995) describes the methods used for the collection of water and sediment samples. These were collected over the period August 15 to September 12, 1995 and were submittted to their respective laboratories by courier on a daily basis.

Plant samples were collected from three sites and one background location on August 29-30, 1995 and September 6, 1995. The methods for collection and for compositing the plant samples is described in the Final Field Operations Plan (Foster Wheeler, July, 1995).

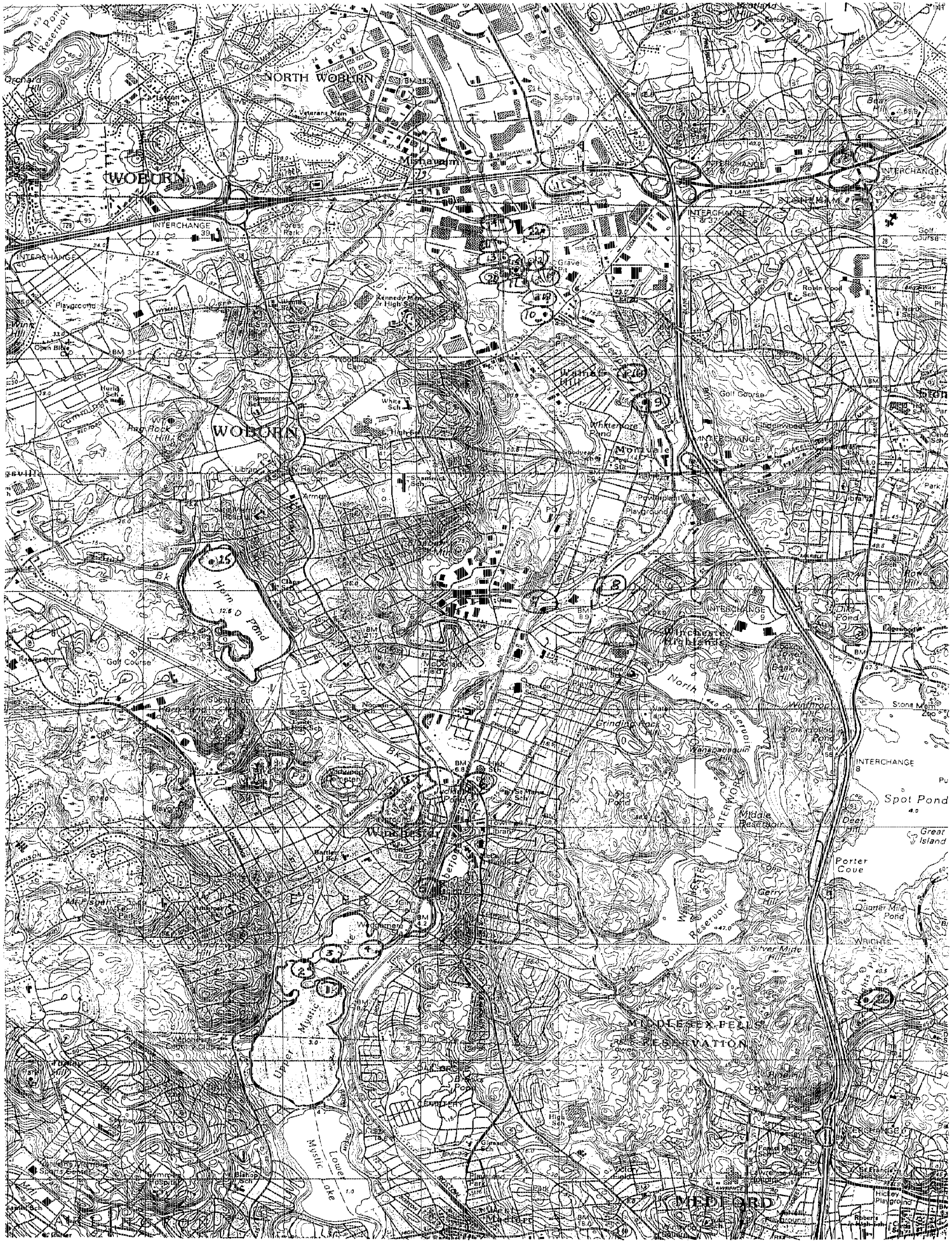
The sediment samples used in the benthic bioassays, were collected from August 29-31, 1995. This sampling was coordinated and overseen by Patti Tyler of the EPA-Environmental Services Division, who also conducted the bioassays, reported in Section 8.

This document is not a report, but a collection of results from the field/laboratory studies. The statistical summaries provided include all data for the class reported, the purpose being, to use the maximum number of data points in the selection of contaminants of concern, or potentially of concern and to provide an objective first presentation of the data. Comparative statistical analyses on smaller data sets, will be executed as needed to support the human health and ecological risk assessments.

This compendium is organized as follows: Section 2 identifies the sampling locations, the specifics of the sampling in the field (where, how analyzed, ID numbers etc) and observations/measurements made at the time of sampling. Sections 3 through 7 present the results of the chemical analyses by matrix. Finally, section 8, presents the reported results of the sediment toxicity tests conducted by EPA's Office of Ecosystem Assessment.

2. FIELD SAMPLING

2.1 Sampling Locations


NORTH WOBURN
WOBURN
Mishawum
INTERCHANGE
STONEHAM
Horn Pond
Winchester Highlands
North Reservoir
Spot Pond
Middle Reservoir
South Reservoir
MIDDLESEX FELLS RESERVATION
Upper Mystic Lake
Lower Mystic Lake
Winchester
MEDFORD
Porter Cove
Great Island
Golf Course

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